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343,077  
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STATE DOCUMENTS

APR 18 1973

Adopted Rules and Regulations  
Pursuant to Chapter 325, Session  
Laws of Montana, 1973

MSE MAY 17 '78



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## APPLICATION FORM FOR SURFACE MINING PERMIT

STATE OF MONTANA

DEPARTMENT OF STATE LANDS

Capitol Building  
Helena, Montana 59601  
Phone 406/449-2074

NAME AND ADDRESS OF APPLICANT  
(Corporations or other business  
entity; give names and addresses  
of principal officers, agents, etc.)

TELEPHONE NUMBER:

NAME AND ADDRESS OF SURFACE OWNER  
(if different from above)

NAME AND ADDRESS OF MINERAL OWNER  
(if different from above)

CONTRACTORS WHO WILL BE WORKING ON  
PROJECT (show names, address, &  
function)

NOTARY:

Subscribed and sworn to before this  
\_\_\_\_\_ day of \_\_\_\_\_,  
19\_\_.

\_\_\_\_\_  
Notary Public for the State of  
Montana

\_\_\_\_\_  
Residing at

\_\_\_\_\_  
Date

APPLICATION FOR SURFACE MINING PERMIT

APPLICATION NO. \_\_\_\_\_

Pursuant to Chapter 325, Session Laws  
of Montana of 1973 requiring permits  
for mining coal, clay, phosphate and  
uranium

INSTRUCTIONS: See rules and regulations  
pursuant to the above.

LOCATION OF MINE AREA:

Sec. Twp. Rge. County

Mineral to be Acres to be distur-  
mined bed in next 12 months

Acres to be dis- Expected date of  
turbed in life commencement:  
operation completion:

Estimated cost of reclamation per acre:

THIS APPLICATION MUST BE ACCOMPANIED BY:

1. Fee of \$50.00.
2. Proposed mining and reclamation plans.
3. Maps (see rules and regulations).
4. Bond (see rules and regulations).
5. All materials and information required under the law and rules and regulations pursuant to it.

I, the undersigned, hereby certify that  
the materials and information contained  
in this application are complete and  
are correct to the best of my knowledge  
and belief.

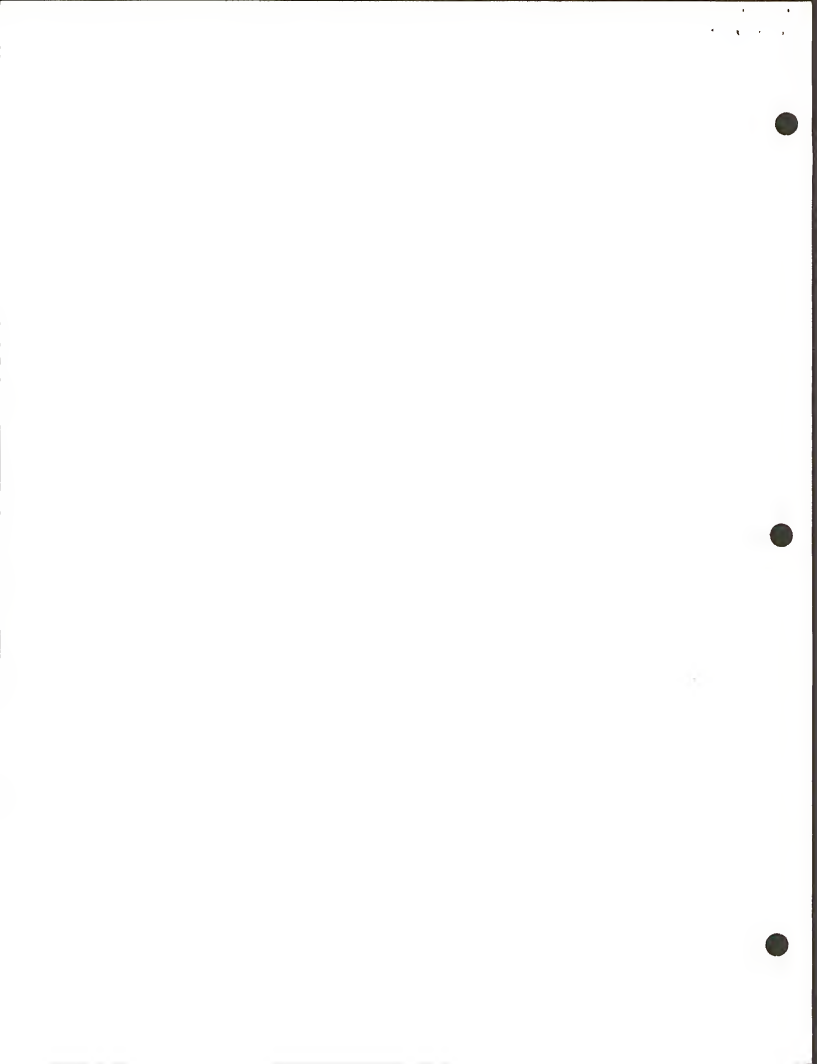
SIGNATURE OF APPLICANT

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

Fee Permit Application returned  
received issued (Statement attached)



## APPLICATION FORM FOR PROSPECTING PERMIT

STATE OF MONTANA

APPLICATION FOR PROSPECTING PERMIT

DEPARTMENT OF STATE LANDS

APPLICATION NO. \_\_\_\_\_

Capitol Building  
Helena, Montana 59601  
Phone 406/449-2074

Pursuant to Chapter 325, Session laws of  
Montana, 1973

NAME AND ADDRESS OF APPLICANT  
(CORPORATIONS OR OTHER BUSINESS  
ENTITY: GIVE NAMES AND ADDRESSES  
OF PRINCIPAL OFFICERS, PARTNERS,  
AGENTS, ETC.)

Instructions: See rules and regulations  
pursuant to above.

LOCATION OF PROSPECT AREA

SEC:      TWP:      RGE:      COUNTY:

TELEPHONE NUMBER:

MINERALS TO BE PROSPECTED:

ACRES TO BE DISTURBED

EXPECTED DATES OF

STARTING:      COMPLETION:

METHOD OF PROSPECTING: (Refer to maps, drill holes, excavations, etc.)

THIS APPLICATION WILL BE ACCOMPANIED

THE APPLICANT AGREES TO

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>1. \$100.00 fee.</li> <li>2. Maps (see rules and regulations).</li> <li>3. Reclamation and revegetation bond (see rules and regulations).</li> <li>4. Detailed prospecting reclamation plan to include method of reclamation and revegetation.</li> </ul> | <ul style="list-style-type: none"> <li>1. Submit progress reports as required.</li> <li>2. Promptly reclaim the disturbed acreage as outlined in the prospecting plan.</li> </ul> |
|--|---|

NOTARY:

I, the undersigned, hereby certify that the materials and information contained in this application are complete and are correct to the best of my knowledge and belief.

Subscribed and sworn to before this  
\_\_\_\_\_ day of \_\_\_\_\_,  
19\_\_\_\_.

SIGNATURE OF APPLICANT

\_\_\_\_\_  
Notary Public for the State of  
Montana

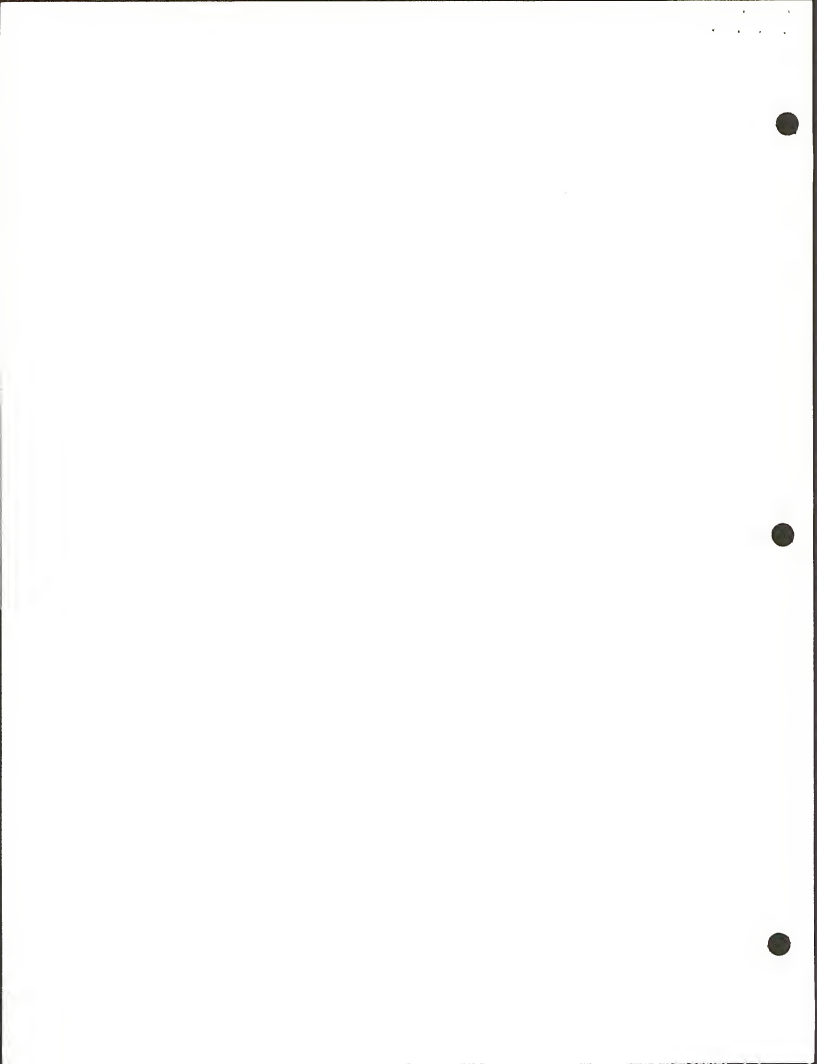
NAME

Residing at

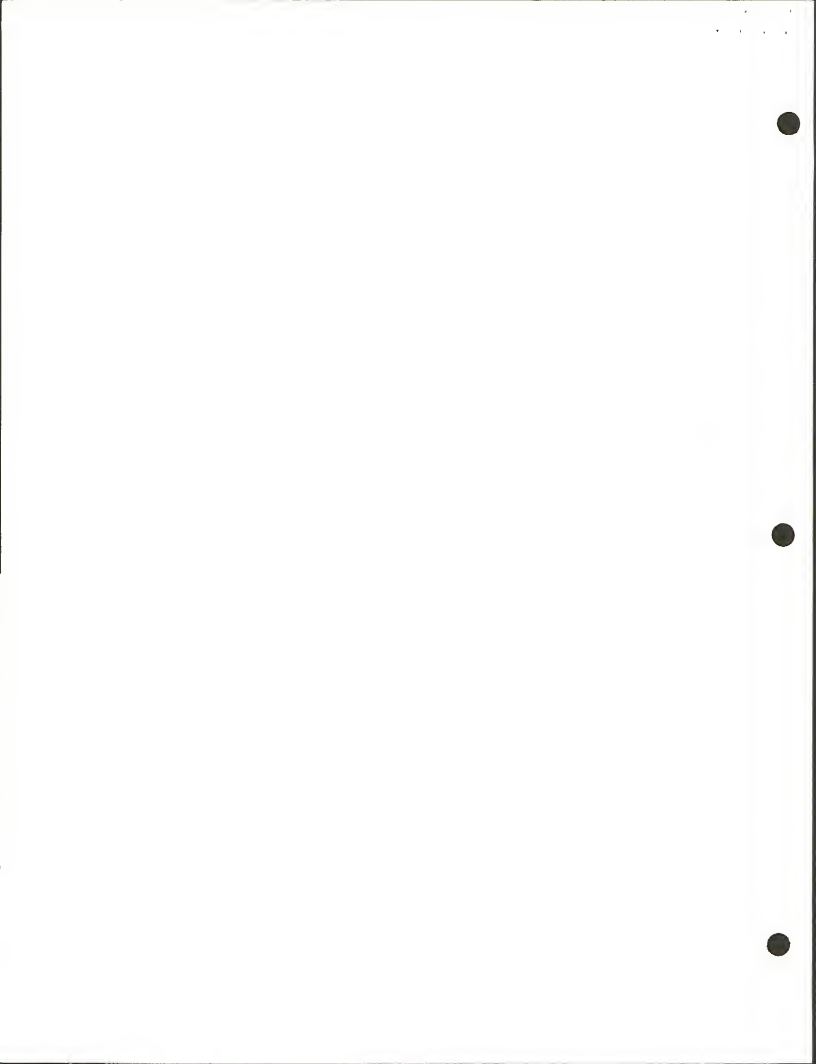
TITLE

My Commission expires

DATE









## PLANTING REPORT FORM

STATE OF MONTANA  
DEPARTMENT OF STATE LANDS

Capitol Building  
Helena, Montana 59601  
Phone 406/449-2074

PERMIT NUMBER \_\_\_\_\_  
PLANTING REPORT

Pursuant to Chapter 325, S.L.M., 1973.

REPORT NO. \_\_\_\_\_

INSTRUCTIONS: See Rules and Regulations  
pursuant to Chapter 325.

THIS REPORT IS TO BE SUBMITTED TO THE BOARD AT LEAST 60 DAYS PRIOR TO THE DATE  
OF PERMIT EXPIRATION.

NAME AND ADDRESS OF PERMIT HOLDER

LOCATION OF OPERATION

Type of seed or plant: (include mixture and amount)

Seed Source:

DATE OF PLANTING OR SEEDING:

SIZE OF AREA PLANTED OR SEEDED (ACRES):

Method and description of planting or seeding: (include soil supplements used  
& amounts & seed bed preparation)

Proposed future use of land:

Name and address of surface landowner  
(if different from permit holder)

Names and address of contractor (if  
seeding done other than by permit holder)

CERTIFICATION

FOR DEPARTMENT USE ONLY

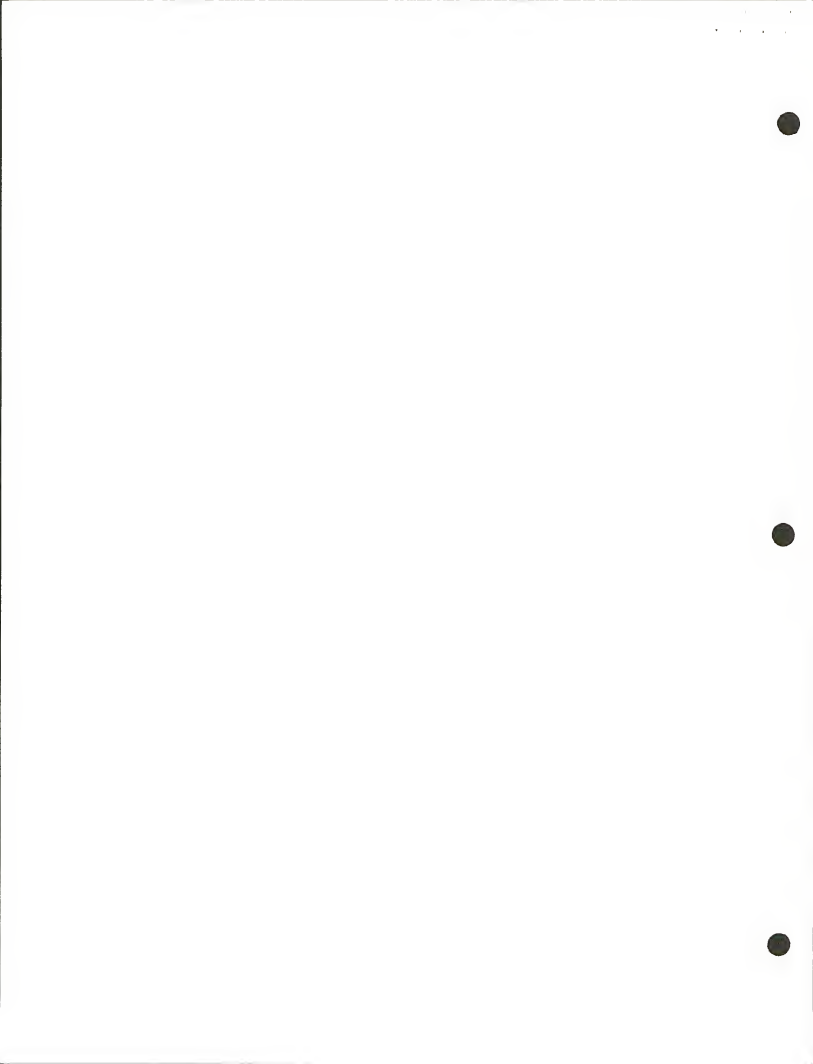
Signature \_\_\_\_\_

Date Accepted \_\_\_\_\_

Title \_\_\_\_\_

Accepted by \_\_\_\_\_

Date \_\_\_\_\_



## SURFACE MINING PERMIT FORM

STATE OF MONTANA  
DEPARTMENT OF STATE LANDS  
Capitol Building  
Helena, Montana 59601  
Phone 406/449-2074

Surface Mining Permit No. \_\_\_\_\_  
Pursuant to Chapter 325, SLM, 1973

This permit when executed by the Commissioner of State Lands shall authorize the operator to commence surface mining activities as specified herein and on maps, plans, specifications and applications submitted by the operator, upon filing of a performance bond as specified by the Board.

Name and Address of Operator		Legal Description of Mine Location
		Section T N R E County S W
Minerals to be Mined	Acres to be Disturbed During next 12 months	Acres to be Disturbed during life of Operation covered by this permit

Initial Bond Level (Per Acre)	Total Initial Bond Level
----------------------------------	--------------------------

This permit authorizes the permittee to conduct mining activities as specified in:

1. The Application for Mining Permit Number \_\_\_\_\_ received by the Department on \_\_\_\_\_, 19\_\_\_\_.
2. The mining and reclamation plan numbered \_\_\_\_\_ covering this mine or mine complex approved by the Commissioner of State Lands on \_\_\_\_\_, 19\_\_\_\_.

This permit and its associated reclamation plan may be modified by the Board, upon proper application of the permittee, at any time during the term of the permit and for any of the following reasons:

1. To modify the requirements so they will not conflict with existing laws;
2. The previously adopted mining and reclamation plan is impossible or impracticable to implement and maintain;
3. The operator and an authorized agent of the Department mutually agree, in the field, to temporarily modify the plan, pending final approval by the Board.

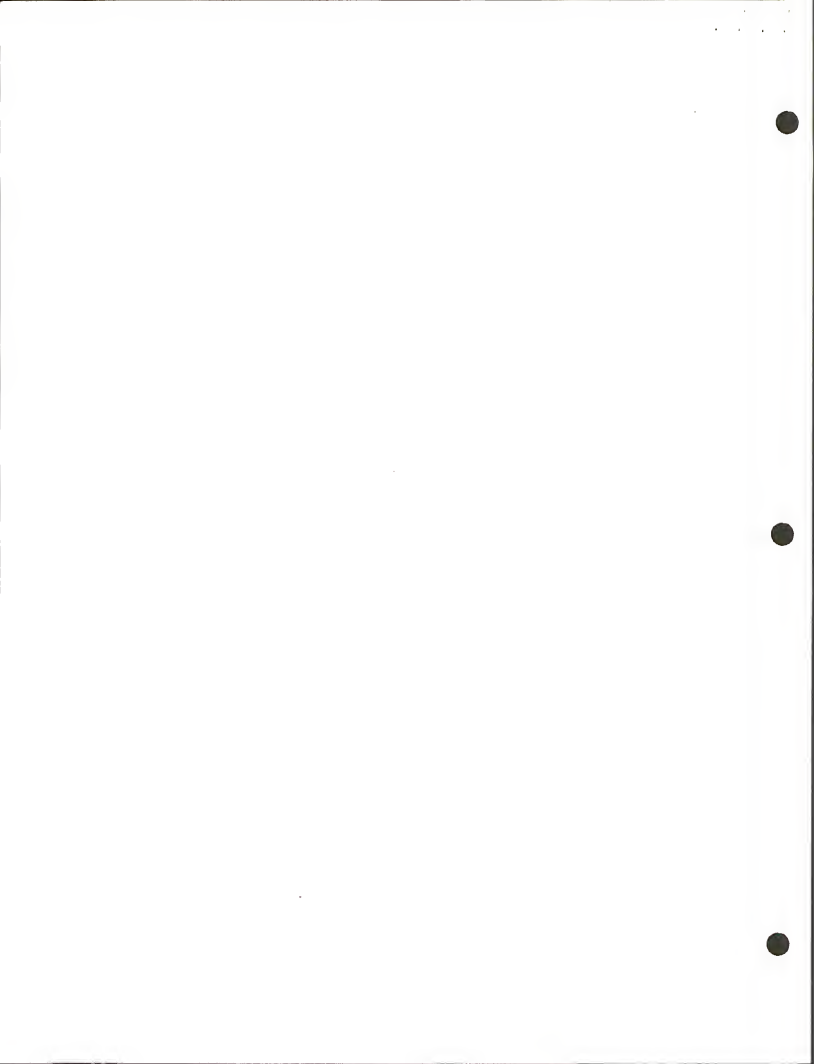
This permit is approved and issued by:

Renewal Date: \_\_\_\_\_

\_\_\_\_\_  
Commissioner of State Lands

This permit is valid for one year and subject to suspension by non-compliance and may be revoked by order of the Board.

\_\_\_\_\_  
Date



STATE OF MONTANA  
DEPARTMENT OF STATE LANDS

CAPITOL BUILDING  
HELENA, MONTANA 59601  
PHONE 406/449-2074

PROSPECTING PERMIT NO. \_\_\_\_\_

PURSUANT TO CHAPTER 325, S.L.M., 1973

26-2.10 (10)-810240

THIS PERMIT WHEN EXECUTED BY THE COMMISSIONER OF STATE LANDS SHALL AUTHORIZE THE OPERATOR TO COMMENCE PROSPECTING ACTIVITIES AS SPECIFIED HEREIN AND ON MAPS, PLANS, SPECIFICATIONS AND APPLICATIONS SUBMITTED BY THE OPERATOR, UPON FILING OF A PERFORMANCE BOND AS SPECIFIED BY THE BOARD.

NAME AND ADDRESS OF OPERATOR                      PROSPECTING AREA

MINERALS TO BE                      ACRES TO BE DISTURBED                      RENEWAL DATE:  
PROSPECTED                      DURING PROSPECTING

INITIAL BOND LEVEL:                      TOTAL INITIAL BOND LEVEL:  
(PER ACRE)

THIS PERMIT AUTHORIZES THE PERMITTEE TO CONDUCT PROSPECTING ACTIVITIES AS SPECIFIED IN THE PROSPECTING PLAN NUMBERED \_\_\_\_\_  
\_\_\_\_\_ COVERING THIS MINE OR MINE COMPLEX APPROVED BY THE COMMISSIONER OF STATE LANDS ON \_\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_.

THIS PERMIT AND ITS ASSOCIATE PROSPECTING PLAN MAY BE MODIFIED BY THE BOARD, UPON PROPER APPLICATION OF THE PERMITTEE, AT ANY TIME DURING THE TERM OF THE PERMIT AND FOR ANY OF THE FOLLOWING REASONS:

1. TO MODIFY THE REQUIREMENTS SO THEY WILL NOT CONFLICT WITH EXISTING LAWS;
2. THE PREVIOUSLY ADOPTED PROSPECTING PLAN IS IMPOSSIBLE OR IMPRACTICABLE TO IMPLEMENT AND MAINTAIN;
3. THE OPERATOR AND AN AUTHORIZED AGENT OF THE DEPARTMENT MUTUALLY AGREED, IN THE FIELD, TO TEMPORARILY MODIFY THE PROSPECTING PLAN, PENDING FINAL APPROVAL BY THE BOARD.

THIS PERMIT IS APPROVED AND ISSUED BY:

THIS PERMIT IS VALID FOR ONE YEAR AND IS SUBJECT TO RENEWAL,  
SUSPENSION OR REVOCATION AS DEEMED NECESSARY BY THE BOARD.

\_\_\_\_\_  
COMMISSIONER OF STATE LANDS

\_\_\_\_\_  
DATE

26-48.14



## RECLAMATION BOND

STATE OF MONTANA \_\_\_\_\_ No. \_\_\_\_\_  
 Board of Land Commissioners RECLAMATION BOND  
 Helena, Montana 59601

KNOW ALL MEN BY THESE PRESENTS, That we (I), \_\_\_\_\_,

\_\_\_\_\_ as Principal, and  
 \_\_\_\_\_ a corporation organized  
 and existing under the laws of the State of \_\_\_\_\_ and duly  
 authorized to transact business in the State of Montana, as Surety, are held and  
 firmly bound unto the State of Montana, acting through the Board of Land  
 Commissioners, in the sum of \_\_\_\_\_ (\$ \_\_\_\_\_)  
 DOLLARS, for the payment of which sum, well and truly to be made, we bind our-  
 selves, and each of our legal representatives, executors, administrators,  
 successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has applied for a permit from the Board of Land  
 Commissioners to develop a mine or mine site on the following premises, to wit:

NOW, THEREFORE, The conditions of this obligation are such that if the  
 above bounded Principal shall, in conducting such \_\_\_\_\_ operations  
 faithfully perform the requirements of the \_\_\_\_\_, the reclamation  
 plan and \_\_\_\_\_ relating to \_\_\_\_\_  
 and the Rules and Regulations adopted pursuant thereto, then this obligation  
 shall be exonerated and discharged and become null and void; otherwise to remain  
 in full force and effect.

PROVIDED, However, the Surety shall not be liable under this bond for an  
 amount greater in the aggregate than the sum designated in the first paragraph  
 hereof, and shall not be liable as respects any obligation related to \_\_\_\_\_  
 operations performed after the expiration of thirty (30)  
 days from the date of the mailing by the Surety of a cancellation notice  
 directed to the Principal and the Board of Land Commissioners, Helena, Montana.  
 The bond shall remain in full force and effect as respects obligations and  
 related to \_\_\_\_\_ operations performed prior to the  
 effective date of such cancellation unless the Principal files a substitute  
 bond, approved by the Board of Land Commissioners, or unless the Board of Land  
 Commissioners shall otherwise release the Surety.

Signed, sealed and dated this \_\_\_\_\_ day of \_\_\_\_\_  
 \_\_\_\_\_, 19\_\_\_\_.

\_\_\_\_\_  
 Signature: Principal

\_\_\_\_\_  
 Title

(Surety's Seal)

\_\_\_\_\_  
 Mailing Address

Bond Approved \_\_\_\_\_,

\_\_\_\_\_  
 Surety

\_\_\_\_\_  
 Commissioner of State Lands

\_\_\_\_\_  
 Mailing Address





STATE OF MONTANA  
SAVINGS CERTIFICATE ASSIGNMENT

26-2.10(10)-S10260

- I. FOR VALUE RECEIVED, \_\_\_\_\_, ASSIGNOR, DOES HEREBY ASSIGN, TRANSFER, AND SET OVER TO THE STATE OF MONTANA, DEPARTMENT OF STATE LANDS, HEREINAFTER CALLED THE STATE, ALL RIGHTS AND INTERESTS IN A SAVINGS CERTIFICATE No. \_\_\_\_\_ IN THE AMOUNT OF \$ \_\_\_\_\_, PAYABLE ON OR AFTER \_\_\_\_\_ ISSUED BY \_\_\_\_\_ HEREINAFTER CALLED BANK, AND PAYABLE TO \_\_\_\_\_ THE ASSIGNOR HEREIN.
- II. THE ASSIGNOR MAKES THIS ASSIGNMENT PURSUANT TO \_\_\_\_\_ AND THAT \_\_\_\_\_ No. \_\_\_\_\_ ISSUED BY THE STATE TO \_\_\_\_\_, 19\_\_\_\_.
- III. THE ASSIGNOR MAY WITHDRAW OR OTHERWISE DISPOSE OF ANY EARNINGS ATTRIBUTED TO THE SAVINGS CERTIFICATE WHILE THE SAME IS ASSIGNED TO THE STATE.
- IV. THE ASSIGNOR MAY, WITH THE CONSENT OF THE STATE, REPLACE OR RENEW A SAVINGS CERTIFICATE ONCE IT HAS EXPIRED, OR IS VOIDED BY THE BANK AND THE ASSIGNOR SHALL BE ENTITLED TO THE RIGHTS AS LAID OUT IN CLAUSE III WITH RESPECT TO THE NEW SAVINGS CERTIFICATE. A NEW SAVINGS CERTIFICATE ASSIGNMENT SHALL BE EXECUTED IF THE SAVINGS CERTIFICATE IS REPLACED.
- V. THE STATE MAY AT ANY TIME AFTER THE ASSIGNOR FAILS TO FULLY COMPLY WITH ALL REQUIREMENTS OF \_\_\_\_\_ THE RULES AND REGULATIONS OF THE STATE BOARD OF LAND COMMISSIONERS AND THE SAID PERMIT OR CONTRACT, AND AFTER GIVING WRITTEN NOTICE TO THE ASSIGNOR, SURRENDER THE SAVINGS CERTIFICATE TO THE BANK IN EXCHANGE FOR MONEY.
- VI. THE ASSIGNOR IS ENTITLED TO ANY EARNINGS OR INTEREST UPON THE CASH PROCEEDS AFTER THE STATE HAS SURRENDERED THE SAVINGS CERTIFICATE.
- VII. THE SAVINGS CERTIFICATE SHALL BE HELD BY \_\_\_\_\_ DURING THE TERM OF THIS ASSIGNMENT.
- VIII. THE ASSIGNOR HEREBY AUTHORIZES AND DIRECTS THE BANK TO PAY THE ABOVE-DESCRIBED SAVINGS CERTIFICATE AS INSTRUCTED BY THE STATE UNTIL SUCH TIME AS THE BANK SHALL RECEIVE THE RELEASE PROVIDED FOR BELOW. THE BANK SHALL NOT BE LIABLE TO INQUIRE WHETHER THERE HAS BEEN PERFORMANCE BY ASSIGNOR OR TO SEE TO THE APPLICATION OF ANY MONEYS PAID ON INSTRUCTION OF THE STATE, AND IN SUCH MATTERS THE BANK MAY RELY UPON THE INSTRUCTIONS OF THE STATE EXECUTED OVER THE SIGNATURE OF THE PERSON, OR HIS DESIGNEE, APPEARING UNDER THE ACCEPTANCE BELOW WITHOUT THE NEED TO VERIFY THE AUTHORITY OF SUCH PERSON. NOTHING HEREIN SHALL PREVENT THE STATE FROM DESIGNATING A PERSON AUTHORIZED TO ACT FOR IT IN ANOTHER LAWFUL MANNER.
- IX. SIGNED AND DATED AT \_\_\_\_\_, MONTANA, THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 19\_\_\_\_.

(ADDRESS)

(ASSIGNOR'S SIGNATURE)

BANK ACCEPTANCE

- X. THE \_\_\_\_\_ BANK, AS WITNESSED BELOW BY THE SIGNATURE OF A DULY AUTHORIZED OFFICER, HEREBY RECOGNIZES THE ABOVE ASSIGNMENT OF SAVINGS CERTIFICATE No. \_\_\_\_\_ IN THE AMOUNT OF \$ \_\_\_\_\_ THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 19\_\_\_\_.

(BANK)

(AUTHORIZED SIGNATURE)

(ADDRESS)

STATE ACCEPTANCE

- XI. THE STATE OF MONTANA, DEPARTMENT OF STATE LANDS, HEREBY ACCEPTS THE FOREGOING ASSIGNMENT OF THE SAVINGS CERTIFICATE No. \_\_\_\_\_ DRAWN ON \_\_\_\_\_ IN THE AMOUNT OF \$ \_\_\_\_\_ THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 19\_\_\_\_.

(AUTHORIZED SIGNATURE)

RELEASE

- XII. THE ABOVE ASSIGNMENT OF SAVINGS CERTIFICATE No. \_\_\_\_\_ DRAWN ON \_\_\_\_\_ IN THE AMOUNT OF \$ \_\_\_\_\_ 19 \_\_\_\_\_ HEREBY RELEASED. THE AUTHORIZED SIGNATURE AND SEAL, BELOW, SHALL WITNESS THE TERMINATION OF THE STATE'S INTEREST IN THE ASSIGNMENT.

(SEAL)

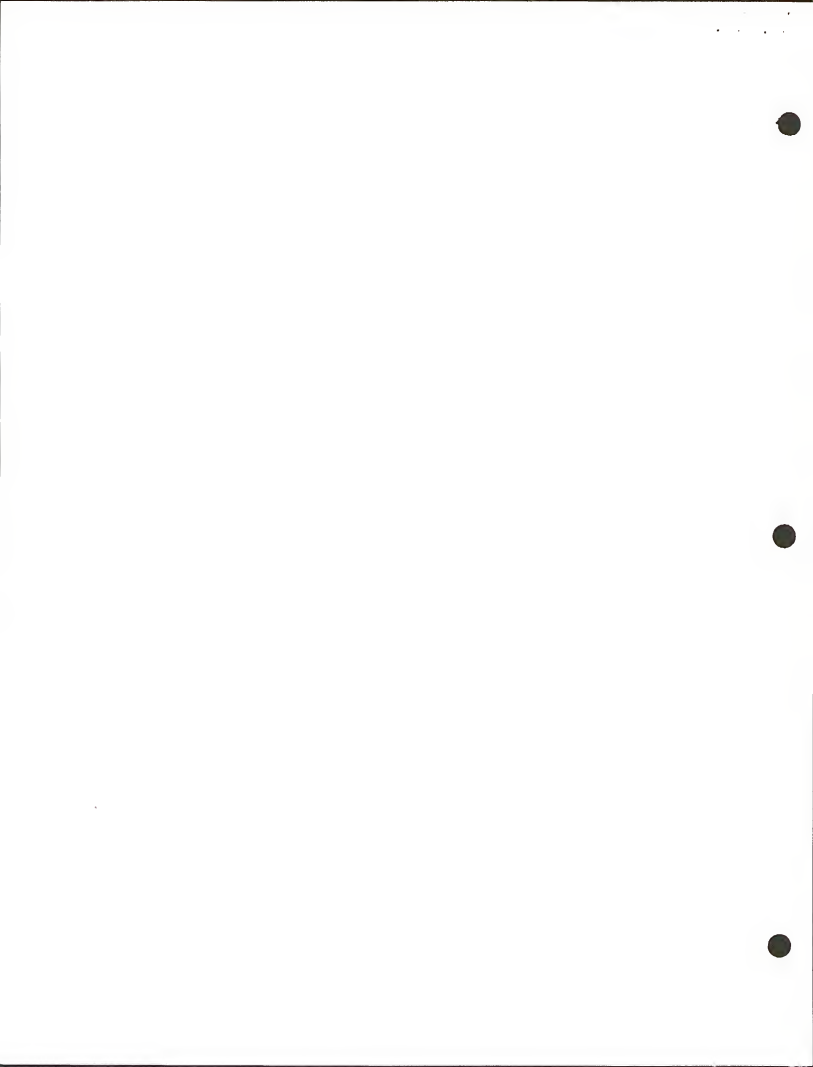
(AUTHORIZED SIGNATURE)

- I, \_\_\_\_\_, ASSIGNOR IN THE ABOVE AGREEMENT, RECOGNIZE BY MY SIGNATURE BELOW THE RELEASE OF THE ASSIGNMENT AS CARRIED OUT IN CLAUSE XII ABOVE.

SIGNED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 19\_\_\_\_.

(ASSIGNOR'S SIGNATURE)

No. \_\_\_\_\_



26-2.10(10)-S10270 APPLICATION FOR A STRIP MINING PERMIT

(1) All tests, analyses or surveys carried out pursuant to these rules and regulations shall be performed or certified by a qualified person. The method and/or procedures used in a given test, analysis or survey shall be described.

(2) All materials received toward permit application prior to the formal adoption of these rules may be accepted by the Department.

(3) An application for a strip mining permit shall be made on forms provided by the Department.

(4) Two (2) copies of all applications, maps, reports or other informational data shall be required. In addition to the information specifically required in the law, the following information shall also be included as part of an application for a strip mining permit:

(a) A listing, location and description of the archaeological, historical, ethnological and cultural values of the area to be affected. When possible, such values shall be located and identified on accompanying maps. Published informational research or other information must be referenced.

(b) A comprehensive listing, location and description of significant or unique scenic and/or geological formations or sites.

(c) A narrative explanation and/or other means necessary showing that the permit area does not possess special, exceptional, critical, or unique characteristics as defined in Section 9 (2), Chapter 325; or that surrounding land does not possess special, exceptional, critical or unique characteristics that would be adversely affected by mining.

(5) If complete information regarding subheadings (a) and (b) above has been previously submitted with an approved prospecting permit covering the same area, duplication will not be required if the information is judged to still be relevant by the Department.

(6) The applicant shall prominently publish an announcement of his application for a new permit as a legal notice in a daily newspaper generally circulated in the county of the operation. The announcement shall include a detailed legal description of the area of land to be affected in the permit year. Proof of publication shall be provided the Department.

(7) At least thirty (30) days but not more than sixty (60) days prior to the annual renewal date of the permit the operator shall submit an application for renewal to the Department. This application shall include and the maps shall show:

(a) The exact number of acres of land affected by the operation in the current year.

(b) The extent of backfilling and grading performed during the current permit year.

(c) The extent of revegetative reclamation (seeding or planting) performed during the current permit year.

(d) Any undisturbed area currently permitted but which will be disturbed during the next permit year. An operator seeking to have a permit renewed shall also designate current pit spoils, roads, treatment facilities and sediment basins, and other features that will be utilized. All permit areas not renewed shall be reclaimed as defined by current regulations.

(e) Any revisions of the operating procedures as previously approved in writing by the Department.

(f) Any other relevant information the Department may require.

(8) In all cases where a map depicting surface conditions is required, a current 7½ minute U.S. Geological Survey map or equivalent shall be submitted, if available. Permit and annual report maps shall be of a scale of not less than 400 feet or greater than 660 feet to the inch.

#### 26-2.10(10)-S10280 PROSPECTING

(1) Application. A person who intends to prospect for coal, uranium, clay or phosphate rock on land not included in a valid strip mining permit must obtain a valid prospecting permit from the Department. An application for a prospecting permit shall be made on forms provided by the Department, and shall be accompanied by the following information:

(a) Documentation that the proposed exploration program would not adversely affect any area possessing special, exceptional, critical, or unique characteristics as defined in Section 9(2), Chapter 325. The applicant shall promptly report the existence of such characteristics if in the course of prospecting he becomes aware of them.

(b) Identification of any significant historical, archaeological, ethnological, and cultural values in the area to be affected.

(c) A narrative description of the significant fish and wildlife species in the permit area, including rare and endangered species as listed by the Bureau of Sport Fisheries and Wildlife.

(d) A narrative description of the local scenic, topographic, and/or geological formations in the area to be affected.

(e) A prospecting map which meets the following requirements:

(i) The map shall be of sufficient size and scale to adequately show all areas to be prospected. Standard United States Geological Survey Topographic quadrangle maps will be used as base maps, if available.

(ii) If prospecting by test hole exploration is proposed, the maps shall include proposed locations, size and the average

proposed depth of test holes. Specific locations for initial exploration shall be shown by quarter section, section, township and range. New road construction for drill rig or seismic equipment access shall be clearly indicated on the maps. Permanent roads, and roads that are to be abandoned, shall be identified.

(iii) Excavations or test cuts shown by location and size.

(iv) Location of streams, lakes, stockwater ponds, wells or springs that are known or readily discoverable proximate to prospecting operations.

(f) A narrative description of the exploration program which shall as a minimum include:

(i) A description of the proposed method of exploration.

(ii) The type of equipment to be used in the exploration.

(iii) The number of proposed test holes and their size and depth (refer to map locations); and the drill medium (air, water, fluid, etc.) to be used.

(iv) A plan showing earth moving contemplated for road and drill sites in the prospecting program.

(v) The mineral or minerals to be prospected.

(vi) The source of the applicant's legal right to prospect for the mineral on the land affected by the permit.

(vii) A discussion of preventive and/or corrective measures that will be taken to guard against or correct water pollution problems that develop with streams, lakes, stockwater ponds, wells or springs that are known or readily discoverable.

(2) In the event that the Department must investigate possible environmental damage or complaints which may occur as a direct result of prospecting the permit area, the applicant shall furnish sufficient information to the Department to facilitate such investigation. Such information will include stratigraphic findings, test hole logs and related data.

(3) Reports. Progress reports shall be required sixty (60) days prior to permit expiration. The Department may require more frequent reports as deemed necessary. Progress reports shall include, but not be limited to, the following information:

(a) Location of all test holes.

(b) Updated maps.

(c) Any road construction.

(d) Current location of all drill rigs and/or test equipment.

(e) Areas disturbed, graded and seeded.

(4) Renewal. At least thirty (30) days, but not more than sixty (60) days prior to the annual renewal date of the permit, the operator shall submit an application for permit renewal to the Department. This application shall include:

(a) The number of acres of land affected by the operation.

(b) The extent of the reclamation performed.

(c) A copy of the map filed with the original application which shall show necessary revisions and any additional exploration proposed in the ensuing year.

(5) Roads and Drill Sites. Roads or drill sites which are determined to be within an area to be strip mined need not be reclaimed. The Department may require grading and/or temporary revegetation of such areas if an excessive amount of time will pass before the area is mined. Prospecting roads shall be constructed according to the following requirements:

(a) Insofar as possible all roads shall be located on benches, ridges, and flatter slopes to minimize disturbance and enhance stability.

(b) Roads shall not be constructed up a stream channel or so close that the material shall spill into the channel.

(c) Road gradients shall be kept low (except for short pitches to take advantage of topography). Maximum sustained grades may not exceed eight (8) percent. Pitch maximum may not exceed twelve (12) percent and may not be over 300 feet in length.

(d) Streams shall be crossed at or near right angles unless contouring down to the stream bed will result in less potential stream bank erosion. Structure or ford entrances and exits must be constructed to prevent water from flowing down the roadway.

(e) A ditch must be provided on both sides of a through-cut and with the exception of outsloping roads, on the inside shoulder of a cut-fill section, with ditch relief cross drains being spaced according to grade. Water must be intercepted before reaching a switchback or large fill and be led off. Water or a fill or switchback must be released below the fill or switchback, not over it. Waterbars shall be installed where needed.

(f) Culverts shall be installed at prominent drainage-ways, small creeks and springs. Such culverts must be constructed in keeping with local Soil Conservation Service recommendations. Where necessary, culverts must be protected from erosion by adequate rock riprap.

(g) Trees and vegetation may be cleared for only the essential width necessary to maintain slope stability and to serve traffic needs.

(h) Drainage facilities shall be installed as road construction progresses.

(i) Roads shall be outsloped whenever possible. If roads are to be used during snow season, insloping with proper drainage consideration is acceptable for vehicle safety reasons.

(j) Snowplowing shall be done in such a manner that runoff water shall not be trapped between the snow berms and run down the road.

(k) Materials which slough or slump onto the road bed or into the roadside drainage ditch before the permittee abandons the area shall be disposed of in the road bed or in a designated fill area in such a manner that will not obstruct any of the drainage facilities heretofore described.

(6) If exploratory drilling is proposed the prospecting plan shall contain the following commitments:

(a) Drill sites shall not be constructed in stream channelways (dry or flowing).

(b) Excavations and dozer work shall be kept to a minimum. All reasonable efforts will be made to locate drill sites in areas where no dozer work is necessary.

(c) Drilling mud and drill cuttings shall be confined to the site and if possible placed back in the drill hole as soon as geophysical loggings are complete. Seismic plugs shall be placed three (3) feet below the surface and the remainder of the hole shall be completely backfilled. The remainder of the cuttings that cannot be placed in the drill hole shall be slightly mounded over the hole and blended with the surrounding soils and the elevation of the adjacent surface.

(d) All refuse from drilling operations shall be completely disposed of by burying or hauling to an approved land-fill dump.

(e) Should an artesian water flow be encountered, cement shall be placed in the hole in such a manner as to seal off the zone from which the water is flowing.

(7) Test Pits or Other Excavations.

(a) Test pits or other excavations shall be located out of natural flowing streams.

(b) Spoil shall not be placed in drainageways. The lower edge of spoil piles shall be placed well above the high-water flood level.

(c) Reclamation plans and preplanning efforts for excavations or test pits that are to produce test shipments of coal, clay or ore shall be of essentially the same nature as those required for strip mining permits.

(8) Reclamation.

(a) No mixing of underground waters detrimental to any existing or potential water supply may result from the prospecting operations. Should the mixing of underground waters that may be detrimental to any existing or potential water supplies be detected, that portion of the hole containing the water bearing zone or zones shall be sealed off by spotting a cement plug across the zone or zones or by other approved methods.

(b) All flowing wells shall be permanently sealed unless approved by the Department for other uses. The Department may require a written request from a landowner who desires that a drill site be reclaimed as a well.

(c) Aquifers shall not be contaminated by surface drainage.

(d) Topsoil removal shall precede each step of the prospecting operation where any excavation is involved.

(e) Planting and Revegetation. A suitable permanent diverse vegetative cover capable of meeting the criteria set forth in Section 12 of Chapter 325, Session Laws of Montana, 1973, shall be established on all areas of land affected except areas of authorized water confinement. Recommendations of the Department shall be followed. An operator shall establish a permanent diverse vegetative cover of predominantly native species by seeding or planting, by seedling transplants, by establishing sod plugs, and/or by other methods as approved by the Department.

#### 26-2.10(10)-S10290 DEFINITIONS

(1) Access Roads. Access roads are those roads leading from a public roadway to the mine complex.

(2) Haulageway Roads. Haulageway roads are those roads leading from the tipple, processing, or mine complex areas onto or through areas that have been mined or are being mined.

(3) Ramp Roads. Ramp roads are those roads leading from the pit to the haulageway road.

(4) Soil Horizon. A soil horizon may be defined as a layer within a soil that is approximately parallel to the soil surface and that has properties that are produced by soil forming processes but that are unlike those of adjoining layers.

#### 26-2.10(10)-S10300 PREPLANNING

(1) A person proposing an operation of more than one year's duration shall submit intended mining and reclamation plans along with maps for the anticipated life of the operation. The intended mining and reclamation plan shall be divided into two (2) time periods as determined by the Department. The intended mining and reclamation plan for the initial period shall contain all requirements which would be included in the application for an annual permit. The second time period of the intended mining and reclamation plan shall apply to the remaining life of the operation, (as determined at the time of application by mineral rights held either by lease, consignment or ownership). The intended mining and reclamation plans for the second period shall contain in as much detail as possible the requirements of a permit application. The operator shall be obligated to conduct the method of operation and reclamation in accordance with the provisions of the plans unless proposed changes requested by the company are accepted in writing by the Department. The Department may make changes in the mining and reclamation plans when problem situations are revealed



by field inspection or as other relevant information is obtained. Upon request, an aggrieved person shall have an opportunity for a hearing, in accord with Section 24 of the Act, prior to any modification of a permit or reclamation plan. As additional information and/or maps are obtained by the company for the intended area of operations such information shall be promptly submitted to the Department. This rule does not repeal or otherwise modify the duty of an operator to annually apply for a new permit and/or the renewal of an existing permit.

(2) Adequate mine site resource inventories shall be submitted and shall include:

(a) A soil survey describing all major soils being present on the area of operation and their suitability for re-vegetative purposes. The soil survey shall include the following information:

(i) Sampling and analysis of soil horizons in sufficient detail to identify the soil types present within the area of operations and to determine the depths to which soil should be saved within each soil type. Each horizon sample shall be analyzed for the following information:

(aa) The  $P^H$ .

(ab) The salt hazard (conductivity).

(ac) Sodium absorption ratio.

(ad) Cation exchange capacity if the sodium absorption rate is greater than 10.

(ae) Mechanical analyses (texture) and determinations of the percent of macronutrients for each soil horizon present at two or more locations within each soil type.

(ii) A soils map acceptable to the Department. The scale shall be one (1) inch equals two hundred (200) feet unless otherwise altered by the Department. Enlarged aerial photographs may be used as a map base. The map or photograph shall include:

(aa) The soil types present and their boundaries. The operator shall indicate within the various soil types the depth to which he plans on stripping topsoil.

(ab) Soil sample map locations correlated to soil type and horizon testing.

(ac) Further soil studies if required by the Department.

(b) Vegetative surveys as described in Section 6(3)(k) of the Act, which shall include:

(i) A vegetative map acceptable to the Department which delineates community types based on two (2) or more dominant species. Dominant species are those which by their structure, number, or coverage have the greatest functional influence on the type.

(ii) A narrative describing the community types by listing associated species and discussing environmental factors controlling or limiting the distribution of species. Current condition and trend shall be discussed for each community type

or portion thereof if significant differences exist within a type.

(iii) The vegetative survey shall be correlated with the soil survey.

(c) Wildlife Survey which shall include:

(i) A listing of the fish and wildlife species utilizing the permit area, including any species on the rare and endangered list prepared by the U.S. Bureau of Sports Fisheries and Wildlife (Threatened Wildlife of the United States).

(ii) Population density estimates of each species insofar as practicable. Wildlife includes, but is not limited to, birds, mammals, reptiles, amphibians.

(iii) Season or seasons of use by each species must be noted along with a discussion of winter concentration areas, fawning or calving areas, nesting or brooding areas in the area affected.

(d) An aerial reconnaissance photographic survey of the area to be affected may be required by the Department.

(e) A narrative and graphic account of ground water hydrology, including but not limited to the lithology, thickness, permeability, transmissability, production data (if any) and water quality analyses for each aquifer to be disturbed by mining. To assure protection of off-site water supplies, potential and developed, the report shall include:

(i) A listing of all known or readily discoverable wells and springs located three (3) miles downdip from the area to be mined and within one (1) mile of the area to be mined in all other directions.

(ii) A description of alternative water supplies to be undisturbed by mining that could be developed to replace water supplies diminished in quality or quantity by mining activities.

(f) Hydrologic data necessary to monitor water quality and quantity shall be available upon request by the Department.

(g) A detailed description of all materials that will be handled during mining or backfilling operations. The description shall include all physical, chemical, water infiltration, artificial weathering and plant growth data necessary to determine if special spoil handling procedures are necessary.

#### 26-2.10(10)-S10310 MINING AND RECLAMATION PLAN

##### (1) Backfilling and Grading.

(a) Backfilling and grading of the disturbed area shall be completed prior to removal of necessary reclamation equipment from the area of operation. If the operator for good cause shown cannot complete backfilling and grading requirements within the time limits set for current backfilling and grading, the Department may approve a revised timetable. Additional bonding may be required.

(b) An operator shall show where the overburden and parting strata materials are to be placed in the backfill. Materials which are not conducive to revegetation techniques, establishment, and growth shall not be left on the top or within eight (8) feet of the top of regraded spoils or at the surface of any other affected areas. The Department may require that problem materials be placed at a greater depth.

(c) The operator shall bury under adequate fill all materials set forth in Section 20 (2)(a) of Chapter 325, Session Laws of Montana, 1973, only after approval of the method and site by the Department. In the event that the operator plans to use fly-ash for fill material, it must be shown by adequate testing and analysis that the fly-ash material will not have any adverse or detrimental effect. Plans for placement of fly-ash or any other foreign material or processes in the backfill must be approved by the Department.

(d) Box cut spoils or portions thereof, shall be hauled to the final cut if:

(i) Excessively large areas of the mine perimeter will be disturbed by proposed methods for highwall reduction or regrading of box cut spoils or

(ii) Material shortages in the area of the final highwall or spoil excesses in the area of the box cut are likely to preclude effective recontouring.

(e) All final grading on the area of land affected shall be to the approximate original contour of the land. The final surface of the restored area need not necessarily have the exact elevations of the original ground surface. Where a flat surface or a surface with less slope than the original ground surface is desired, such surface shall be deemed to comply with backfilling and grading to the approximate original contour. With the exception of highwalls, railroad loops and access road cuts and fills through unmined lands, no final graded slopes shall be steeper than five horizontal to one vertical (5:1) unless otherwise approved in writing by the Department.

(f) The Department may require terracing to conserve moisture and control water erosion on all graded slopes during the process of current grading. Terraces shall be installed in such a way so as not to prohibit vehicular access or revegetative procedures. Terraces shall be installed at varying intervals as determined by climatic conditions, spoil and topsoil composition and texture, slope steepness, and slope length. Suggested terrace installation intervals shall be submitted in the reclamation plan. Additional surface manipulation procedures shall be installed as required by the Department.

(g) Final grading shall be kept current with mining operations. In order to be considered current, grading and backfilling shall meet the following requirements unless exceptions are granted by the Department.

(i) On lands affected by area strip mining, the grading and backfilling shall not be more than two spoil ridges behind the pit being worked; the spoil from that pit being considered the first ridge. The Department may allow delayed grading of box cut spoils if better recontouring will result.

(ii) If the operation involves stripping and augering, the augering shall follow the stripping by not more than sixty (60) days and final grading and backfilling shall follow the augering by not more than fifteen (15) days, but in no instance shall an area be left ungraded more than 1,500 feet behind the augering.

(iii) All backfilling and grading shall be completed within ninety (90) days after the department has determined that the operation is completed or that a prolonged suspension of work in the area will occur. Final pit reclamation shall proceed as close behind the coal loading operation as the frequency and location of ramp roads, the use of overburden stripping equipment in highwall reclamation, and other factors may allow.

(iv) Grading and backfilling of other types of subject excavations shall be kept current as departmental directives dictate for each set of field circumstances.

(h) Reclamation equipment to be used in grading and highwall reduction shall be listed in the application for a permit.

(2) Highwall Reduction.

(a) All highwalls shall be reduced and the steepest slope of the reduced highwall shall be no greater than twenty (20) degrees from the horizontal. Highwall reduction shall be commenced at or beyond the top of the highwall and sloped to the graded spoil bank. In all cases the final pit shall be backfilled so as to cover all exposed coal seams with at least 4 feet of non-toxic fill material.

(b) The company shall show by a narrative and cross-sections the plan of highwall reduction including the limits of buffer zones.

(3) Buffer Zones.

(a) All mining activities, including highwall reduction and related reclamation, shall cease at least one hundred (100) feet from a property line, permanent structure, unmineable steep or precipitous terrain, or any area determined by the Department to be of unique scenic, historical, cultural, or other unique value. If special values or problems are encountered the Department may modify buffer zone requirements.

(b) The transition from undisturbed ground shall be blended with cut or fill to provide a smooth transition in topography.

(4) Roads and Railroad Loops.

(a) Haulageway roads through permitted areas shall be allowed providing that their presence does not delay or prevent recontouring and revegetation on immediately adjacent spoils.

(b) Ramp roads will be allowed under the following criteria:

(i) No more than two (2) ramp roads per mile of active pit being mined shall be allowed. Fractional portions of ramp roads resulting from active pit lengths of uneven mileage will be counted as an additional ramp road allowable. (Example: 2.1 (active pit mile length) x 2 (ramp roads/mile) equals 4.2 (ramp roads) or 5 ramp roads allowable.) The Department may authorize an additional ramp road.

(ii) Ramp roads, beginning from the spoil edge of the pit being worked, shall be engineered so as to exhibit an overall 7% grade, or steeper, until topping on graded spoils. As each new pit is excavated, the ramp roads shall be regraded, as soon as possible, so as to remain at an overall 7% or steeper grade from the spoil side of the new pit. In all cases, ramp road renovation grading shall allow for topsoiling and revegetative activities to proceed during prime revegetative seasons. Lesser slopes may be allowed if the Department makes a written determination that 7% slopes would cause safety problems or hamper successful reclamation.

(c) The Department may require that access roads constructed after the effective date of the Act be graded, constructed, and maintained in accordance with the following requirements:

(i) No sustained grade shall exceed 8 percent (8%).

(ii) The maximum pitch grade shall not exceed twelve percent (12%) for three hundred (300) feet.

(iii) There shall not be more than three hundred (300) feet of maximum pitch grade for each one thousand (1000) feet.

(iv) The grade on switchback curves shall be reduced to less than the approach grade and shall not be greater than ten percent (10%).

(v) Cut slopes shall not be more than 2:1 in soils or ½:1 in rock.

(vi) All grades referred to shall be subject to a tolerance of two percent of measurement. Linear measurements shall be subject to a tolerance of ten percent (10%) of measurement.

(vii) Additional requirements may be imposed by the Department if special drainage or steep terrain problems are likely to be encountered.

(d) The location of a proposed road or railroad loop shall be identified on the site by visible markings at the time the reclamation and mining plan is preinspected and prior to the commencement of construction. No such construction shall proceed along dry coulees and intermittent drainageways unless the operator assures that no off-site sedimentation will result.

(e) Drainage ditches shall be constructed on both sides of the through-cut, and the inside shoulder of a cut-fill section, with ditch relief cross-drains being spaced according

to grade. Water shall be intercepted before reaching a switch-back or large fill, and shall be drained off or released below the fill. Drainage structures shall be constructed in order to cross a stream channel, and shall not affect the flow or sediment load of the stream.

(f) All cut and fill slopes resulting from construction of access road, railroad loop or haulageway road outside of the area to be mined shall be stabilized, and revegetated the first seasonal opportunity.

(g) No roads or railroad loops shall be surfaced with refuse coal, acid producing or toxic material or with any material which will produce a concentration of suspended solids in surface drainage.

(h) All appropriate methods shall be employed by the operator to prevent loss of haulage or access road surface material in the form of dust.

(i) Upon abandonment of any road or railroad loop, the area shall be conditioned and seeded and adequate measures taken to prevent erosion by means of culverts, water bars, or other devices. Such areas shall be abandoned in accordance with all provisions of Chapter 325, Session Laws of Montana, 1973, and MAC 26-2.10(10)S-10330 and MAC 26-2.10(10)-S10340 of the Rules and Regulations adopted pursuant thereto. Upon completion of mining and reclamation activities all roads shall be closed and reclaimed unless the landowner requests in writing and the Department concurs that certain roads of specified portions thereof are to be left open for further use.

26-2.10(10)-S10320 BLASTING

(1) Any person conducting a mining operation shall comply with all state and federal regulations regarding the blasting and handling of explosives.

(2) The blasting regulations contained herein apply to overburden blasting operations and to other operations as the Department may determine.

(3) Where blasting operations are being or shall be conducted on a mining site, a permanent sign shall be erected near the entrances to the mining operation and be plainly visible. The sign shall be a minimum of four feet square with the words "Warning Blasting Area" in letters not less than seven (7) inches in height upon a background of contrasting colors.

(4) All blasting shall be scheduled.

(5) Blasting shall not be conducted during hours of darkness, except in emergency situations such as those posed by approaching thunderstorms.

(6) All holes primed shall be blasted within seventy-two (72) hours.

(7) An operator conducting blasting operations shall notify all adjacent residents within a one (1) mile radius in

writing, by hand or by U. S. mail that blasting will occur at certain times of the day. Adequate measures shall be taken to insure the safety of anyone near the blasting area prior to a blast.

(8) All roads into the blast area shall be guarded against unauthorized entry at least ten (10) minutes prior to the blast to insure that no one except authorized personnel are in the area. Suitable precautions for entry after a blast will be taken in the event of misfire or unusual circumstances.

(9) Audible warning signals shall be used.

(10) All employees on the area of land affected shall be notified of the blast signals. In addition, blast signals shall be conspicuously posted at all entrances to the mine area.

(11) Designated employees, hereinafter called the blasters, shall be in charge of blasting operations, and they shall supervise the fixing of all charges and all blasting operations.

(12) One individual other than the blaster shall be near the blast area, stationed at a safe distance, within view of the blaster and within contact of the blasters. He shall be responsible for blast signals.

(13) Any person conducting blasting operations shall take particular cognizance of any public or private facilities, active underground mines, liquid disposal wells, gas or oil wells, water wells, waterways, public or private water storage facility, or transmission lines in the blast area and shall take appropriate steps to preclude damage to those facilities.

(14) All operators or their certified blasters shall keep a log describing each blast. The following information shall be required:

- (a) The company name;
- (b) The location, date and time of blast;
- (c) The type of material blasted;
- (d) The type of explosive;
- (e) The diameter of the blast holes;
- (f) The number and depth of the holes;
- (g) A description of the stemming;
- (h) The shooting pattern of the blast, including information on maximum weight of charge per hole, per delay, and the burden spacing of the holes, and the type of initiation system.

(15) Every effort shall be made to minimize noise effects from blasting.

(16) Every effort shall be made to minimize the off-site damage occurring from the concussion or vibration effects of blasting.

(17) Notwithstanding any other regulation, blasting shall not be done in such a manner as to eject debris onto adjacent property outside the permit area or so as to constitute a

hazard or endanger or damage persons or property.

26-2.10(10)-S10330 WATER QUALITY: IMPOUNDMENT, DRAIN-  
AGE, AND TREATMENT

(1) All operators shall comply with the following requirements and with all applicable water quality standards established under Montana law and the rules adopted pursuant thereto.

(a) Non-degradation of waters. Waters within the public domain of the state that possess a higher quality than that established on the effective date of established standards shall be maintained at their present high quality consistent with the powers granted to the board. Such high quality waters shall not be lowered in quality unless and until it is affirmatively demonstrated to the board through public hearing, that such a change is justifiable as a result of necessary economic or social development and that the change will not adversely affect the present and future uses of such waters. In implementing this policy as it relates to interstate streams, the Administrator of the Environmental Protection Agency shall be provided with such information as will enable the Administrator to discharge his responsibilities under the Federal Water Pollution Control Act.

(b) Impoundment and Treatment.

(i) Treatment facilities in sufficient size and number consisting of but not limited to collection basins, water retarding structures and siltation dams shall be constructed with prior approval of the Department. All such facilities shall be constructed at or above the points of discharge into receiving streams for the purpose of treating acid or toxic water and for the settling of sediment prior to discharge into the receiving stream. As part of an application for permit, an operator shall submit the design specifications, drawings, method of operation and control, and quality of discharge of the treatment facilities. The operator shall indicate on the maps submitted as part of an application for permit the proposed location of all treatment facilities. Proposed reclamation of treatment facilities shall be included in the reclamation plan.

(ii) Additional treatment facilities may be required by the Department after commencement of the operation if conditions arise that could not be anticipated at the time of the permit application.

(iii) All approved and constructed treatment facilities shall be maintained in proper working order by the operator and operated so that they will perform as proposed in the application for permit. All treatment facilities constructed and approved pursuant to the provisions of this rule shall be monitored by the operator to assure continuous satisfactory



performance until approved reclamation has been accomplished.

(iv) Permanent water impoundments shall not be allowed unless approved by the Department. If the Department determines at any time that a permanent impoundment area will not fill to expected levels, meet acceptable water quality standards or any other relevant criteria, the impoundment area shall be regraded and surface drainage facilitated.

(v) No water quality treatment of approved lakes or ponds shall be permitted without Department approval.

(vi) Monthly monitoring reports, where applicable, shall be submitted to the Department including the number of operating days, the gallons of drainage treated, a log of the tests made in accordance with Subsection (c) of this Rule, and a description of any operating problems and the corrective action taken.

(vii) The operator shall by the treatment of all runoff water prevent the drainage into the waters of the state drainage from any source, the pH of which is less than 6.0 or greater than 9.0, or which contains a concentration of iron in excess of seven (7) milligrams per liter (mg/l). The discharge must register positive net alkalinity (total alkalinity must exceed the total acidity) and the turbidity shall not exceed 100 J.C.U. The Department may modify above requirements if special problems occur.

(viii) The maximum total allowable increase to naturally occurring stream turbidity is ten (10) Jackson Candle Units except that four (4) hours following a major precipitation event, the discharge shall not contain suspended sediments in excess of five hundred (500) Jackson Candle Units above normal and not over one hundred (100) Jackson Candle Units above normal twenty-four (24) hours thereafter. All analyses are to be defined and performed according to the Standard Methods for the Examination of Water and Wastewater, unless otherwise specified in writing by the Department. If the above standards in (vii) and (viii) are in conflict with Federal and/or other Montana state agencies the more stringent regulations will apply.

(c) Drainage.

(i) All surface water which might damage regraded slopes or drain into the stripping pit shall be intercepted on the uphill side of the highwall or other mine perimeters by diversion ditches and conveyed by stable channels or other means to natural or prepared watercourses outside the operation unless it is determined by the Department that such ditches and channels are unnecessary or would create a more serious pollution problem. Such conveyances shall be of sufficient size and grade to prevent overflow into the mine area. If the ditches are likely to carry surface water only intermittently, they will be retopsoiled and revegetated with grasses, forbs and/or legumes. All constructed diversion ditches shall be included in the permit acreage and shown on the map.

(ii) Water accumulating in the course of the operation shall meet the water quality specifications enumerated herein or shall be pumped or siphoned to a treatment or settling facility prior to discharge into a natural drainway. Under no circumstances shall water be discharged onto highly erodible soil or spoil banks.

(iii) No surface mine drainage shall be discharged through or permitted to infiltrate into existing deep mine workings. Location of all known existing deep mines within the permit area and plans for remedial measures shall be included in the application for a permit.

(iv) All drainage from the active mine area shall exit through impoundment or treatment facilities in accordance with Subsection (b)(i) of this Rule.

#### 26-2.10(10)-S10340 TOPSOILING

(1) All available topsoil shall be removed from the area of land affected before further disturbance occurs. Topsoil removal shall precede each step of the mining operation. The operator shall indicate in the reclamation plan the equipment and method used in topsoil salvage and redistribution.

(2) Stockpiles of salvaged topsoil shall be located in an area where they will not be disturbed by ongoing mining operations and will not be lost to wind erosion or surface runoff. All unnecessary compaction and contamination of the stockpiles shall be eliminated and once stockpiled the topsoil shall not be rehandled until replaced on regraded disturbances. The Department may require immediate planting of an annual and/or perennial crop on topsoil stockpiles for the purposes of stabilization. Proposed stockpile locations shall be indicated on the map submitted as part of an application for a permit.

(3) Stockpiled topsoil shall be replaced on all areas to be seeded within a ninety (90) day period prior to vegetative seeding or planting. Extreme care shall be exercised to guard against erosion during application and thereafter. In the case of abandoned roads, the roadbeds shall be ripped, disced, or otherwise conditioned before topsoil is replaced. The Department may prescribe additional alternate conditioning methods for the reclamation of abandoned roadbeds.

(4) If necessary, redistributed topsoil shall be reconditioned by discing, ripping, or other appropriate methods. Gypsum, lime, fertilizer, or other amendments may be added in accordance with MAC 26-2.10(10)S-10350, and/or as stated in the approved reclamation plan.

(5) Spoil surfaces shall be left roughened in final contour grading to eliminate slippage zones that may develop between deposited topsoil and heavy textured spoil surfaces. The operator shall take all measures necessary to assure the

stability of topsoil on graded spoil slopes.

(6) Any application for permit or accompanying reclamation plan which for any reason proposes to use materials other than or along with topsoil for final surfacing of spoil or other disturbances shall document problems of topsoil quantity or quality. The application or plan must also show that the topsoil substitute(s) proposed:

(a) Will not contribute to or cause pollution of surface or underground waters;

(b) Will support a diverse cover of predominantly native perennial species equivalent to that existant on the site prior to any mining related disturbances.

#### 26-2.10(10)-S10350 PLANTING AND REVEGETATION

(1) A suitable permanent diverse vegetative cover capable of meeting the criteria set forth in Section 12 of Chapter 325, Session Laws of Montana, 1973, shall be established on all areas of land affected except traveled portions of railroad loops and roadways or areas of authorized water confinement. Areas shall be planted or seeded during the first appropriate season following completion of grading, topsoil redistribution and remedial soil treatments.

(2) An operator shall establish a permanent diverse vegetative cover of predominantly native species by drill seeding or planting, by seedling transplants, by establishing sod plugs, and/or by other methods. All methods must have prior approval by the Department.

(3) The operator shall utilize locally grown genotypical seed and seedlings when available in sufficient quality and quantity.

(4) An operator shall plant seed of a pure and viable nature. Unless otherwise approved by the Department, seed shall be at least 90% pure. Seeding rates shall reflect germination percentages.

(5) The operator shall consider soil, climate, and other relevant factors when planting and/or seeding to provide for the best seed germination and plant survival.

(6) All drill seeding shall be done on the contour. When grasses, shrubs and/or forbs are seeded as a mixture they may be drill seeded in separate rows at intervals specified in the standards Soil Conservation Service (SCS) planting guidelines. Such mixed seedings shall be done in this manner wherever necessary to avoid deleterious competition of different vegetal types or to avoid seed distribution problems due to different seed sizes.

(7) Soil amendments shall be used as necessary to supplement the soil and to aid in the establishment of a permanent vegetative cover as specified in the approved reclamation plan

or as later deemed necessary by the Department.

(8) An operator shall use any other means necessary to insure the establishment of a diverse and permanent vegetative cover, including but not limited to irrigation, and fencing or other protective measures.

(9) The Department may require the seeding of annual grasses and/or legumes on such areas as it deems necessary.

(10) Mulch shall be immediately applied to all areas that do not have permanent or temporary cover established when, in the opinion of the Department, the grade or length of any slope presents a likelihood of substantial erosion or substantial deposition of sediment into any waters of the state.

(11) The Department will annually inspect seeded areas at the end of the growing season to determine species diversity, germination, and seedling take. If the Department determines that seedings are unsuccessful in terms of good germination and/or seedling take, immediate investigative action shall be taken by the operator at the request of the Department to determine the cause so that alternatives can be employed to establish the desired permanent vegetative cover at the very next seasonal opportunity. The investigative report shall be submitted along with prescribed course of corrective action prior to the next growing season.

(12) If the area affected is to be primarily utilized by domestic stock, the Department may require incorporation of a grazing system after vegetative establishment to gauge stand tolerance to grazing pressure.